CP PROJECT

DESCRIPTION

- This program attempts to simulate a high stakes quiz competition similar to KBC where question will be posed to the contestant in order of increasing difficulty, and they earn more and more money as they answer questions all the way to the Grand Prize.
- The program begins with a message welcoming the contestant and immediately poses the first question.
- A while loop has been created containing the **question()** and the **answer()** functions, which keeps iterating as long as user keeps entering the correct answers. This is done with the help of variable **ctr** which is initially set to 0 but changes its value when answer given is wrong and breaks the loop.
- To avoid repetition and for better time complexity, nested if-else has been discarded in favor
 of using functions. A global variable qactr is used to maintain track of the question to be
 asked and to check the answer, which is discussed below.
- In order to display each question, **question()** function is called which displays question as per value of **qactr** (Iteration number of function determines question number).
- The program then moves to the answer() function, where user's input of possible answer is taken. An answer key of all the questions correct options has been created and stored in an integer array and is compared to the user's answer. If answer turns out to be wrong, ctr value is changed and while loop terminates whereas if answer is correct, prize() function is called upon to display present amount earned.
- The **prize()** function makes use of money variable to store and display money earned by contestant on successfully answering a particular question using switch case.
- Thus the while loop keeps iterating as long as user keeps answering correctly, each time displaying different and dynamic messages until the very last question.
- Once user wins it all/answers incorrectly, a message displays to the user how much money they earned while answering questions and after this the program terminates.

CODE

#include <stdio.h>

int qactr = 0;//counting number of questions and answered correctly answered

int ctr = 0;//counter to break the while loop after user is done answering all questions or answers incorrectly

long int money=0;

```
void prize()//used to store and display money earned after answering each question
{
 switch(qactr)
 {
 case 0:
  money=10000;
  printf("You have won Rs.%ld...Good job!\n",money);
  break;
 case 1:
  money=50000;
  printf("You have won Rs.%ld...Great job!\n",money);
  break;
 case 2:
  money=100000;
  printf("You have won Rs.%ld...Great job!\n",money);
  break;
 case 3:
  money=725000;
  printf("You have won Rs.%ld...Amazing!\n",money);
  break;
 case 4:
  money=2500000;
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```
printf("You have won Rs.%ld...Fantastic!\n",money);
   break;
 case 5:
   money=5000000;
   printf("You have won Rs.%ld...Fantastic!Almost there!\n",money);
   break;
 case 6:
   printf("You have won the grand prize of Rs.1,00,00,000...Congratulations to you!\n You are the
winner of the DJSCE ULTIMATE QUIZ competition!\n");
   break;
 }
}
void question()//used to print questions as per required order decided by gactr
{
 if(qactr==0)
 {
   printf("Question %d:",qactr+1);
   printf("Who is known as Father of The Indian Constitution?\n");
   printf("1.Mahatma Gandhi 2.B.R Ambedkar 3.Narendra Modi 4.Rajendra Prasad\n");
 }
 if(qactr==1)
 {
   printf("Question %d:",qactr+1);
   printf("What is the world's smallest bird??\n");
```

```
printf("1.Sparrow 2.Lovebird 3.Hummingbird 4.Canary\n");
}
if(qactr==2)
{
  printf("Question %d:",qactr+1);
  printf("What is the capital of Australia?\n");
  printf("1.Sydney 2.Queensland 3.Brisbane 4.Canberra\n");
}
if(qactr==3)
  printf("Question %d:",qactr+1);
  printf("What is the name of the biggest technology company in South Korea?\n");
  printf("1.Samsung 2.Huawei 3.Realme 4.Oppo\n");
}
if(qactr==4)
{
  printf("Question %d:",qactr+1);
  printf("What is the last letter of the Greek Alphabet?\n");
  printf("1.Phi 2.Omega 3.Epsilon 4.Sigma\n");
}
if(qactr==5)
{
  printf("Question %d:",qactr+1);
  printf("Who is the Father of Dynamite?\n");
  printf("1.Alfred Nobel 2.Adolf Hitler 3.Sheldon Cooper 4.Joseph Lister\n");
}
if(qactr==6)
```

```
{
    printf("Question %d:",qactr+1);
    printf("The point on Earth that is farthest from land is named after which fictional
character?\n");
    printf("1.Robinson Crusoe 2.Harry Potter 3.Captain Ahab 4.Captain Nemo\n");
 }
}
void answer()//checking whether answer is correct and taking choice of further action
{
  int ans[]={2,3,4,1,2,1,4};
  int ch;
  scanf("%d",&ch);
  if(ch==ans[qactr])
  {
    if(qactr==5)
    {
     prize();
     printf("Congrats on reaching the final question for the grand prize of 1 Crore.\nAre you ready?
Then here we go!!\n");
   }
    else if(qactr==6)
   {
      printf("Correct answer!\n");
      prize();
      ctr=1;
    }
```

```
else
   {
    prize();
    printf("Well done! Now onto the next question\n");
    printf("\n");
   }
   qactr++;
 }
 else
 {
   printf("Sorry! Your journey ends here...\n\n\n\n");
   ctr=1;
 }
}
void main()
{
 printf("-----\n");
 printf("WELCOME TO DJSCE ULTIMATE QUIZ COMPETITION\n");
 printf("-----\n");
 printf("Let us Start....\n");
 while(ctr==0)
 {
   question();
   answer();
 }
```

```
if(qactr!=7)
{
  printf("You walk away from the quiz with Rs.");
  if(qactr==0)
  {
    printf("%ld. Better luck next time :/",money);
  }
  else if(qactr==1)
  {
    printf("%ld. Good attempt.",money);
  }
  else if(qactr==2)
  {
    printf("%d.Good attempt ",money);
  }
  else if(qactr==3)
  {
    printf("%ld. Good attempt.",money);
  }
  else if(qactr==4)
  {
    printf("%ld. Good attempt.",money);
  }
  else if(qactr==5)
  {
    printf("%ld. Close call, but congratulations.",money);
```

OUTPUT

}

}

}

```
WELCOME TO DJSCE ULTIMATE QUIZ COMPETITION
Let us Start....
Question 1:Who is known as Father of The Indian Constitution?
1.Mahatma Gandhi 2.B.R Ambedkar 3.Narendra Modi 4.Rajendra Prasad
 .
************************
You have won Rs.10000...Good job!
Well done! Now onto the next question
Question 2:What is the world's smallest bird??
1.Sparrow 2.Lovebird 3.Hummingbird 4.Canary
 ou have won Rs.50000...Great job!
Well done! Now onto the next question
Question 3:What is the capital of Australia?
1.Sydney 2.Queensland 3.Brisbane 4.Canberra
You have won Rs.100000...Great job!
Well done! Now onto the next question
Question 4:What is the name of the biggest technology company in South Korea?
1.Samsung 2.Huawei 3.Realme 4.Oppo
Question 5:What is the last letter of the Greek Alphabet?
1.Phi 2.Omega 3.Epsilon 4.Sigma
You have won Rs.2500000...Fantastic!
Question 6:Who is the Father of Dynamite?
1.Alfred Nobel   2.Adolf Hitler   3.Sheldon Cooper   4.Joseph Lister
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PROJECT BY -

Shaun Fernandes - 60004210104

Varun Viswanath - 60004210105

Neel Gabani - 60004210127

Harshil Shah - 60004210134